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(11) EP 0 733 469 A3

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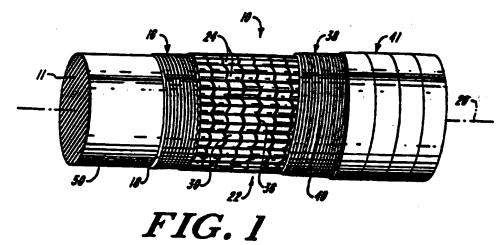
EUROPEAN PATENT APPLICATION

- (88) Date of publication A3: 06.11.1996 Bulletin 1996/45
- (43) Date of publication A2: 25.09.1996 Bulletin 1996/39
- (21) Application number: 96108647.7
- (22) Date of filing: 14.06.1990
- (84) Designated Contracting States: DE FR GB
- (30) Priority: 14.06.1989 US 366464
- (62) Application number of the earlier application in accordance with Art. 76 EPC: 90911104.9
- (71) Applicant: FIBERSPAR, INC. West Wareham, MA 02576 (US)

(51) Int. CI.⁶: **B32B 5/12**, B29C 70/22, B29C 53/60

- (72) Inventor: Quigley, Peter A. Cataumet, MA 02534 (US)
- (74) Representative: Blumbach, Kramer & Partner Patentanwälte Radeckestrasse 43 81245 München (DE)
- (54) Composite structural member with high bending strength and method of manufacture
- (57) The invention relates to an elongated tubular composite member comprising a first ply having axially extending first fibers helically oriented relative to the elongation of the composite member and having a clockwise extending second fiber component interwoven with a counter-clockwise extending third fiber com-

ponent, both of which are helically oriented relative to said first fibers. Further, a method of manufacturing such an elongated tubular composite member is disclosed.





EUROPEAN SEARCH REPORT

Application Number EP 96 10 8647

Category	Citation of document with it of relevant pa	ndication, where appropriate,	Relevant to claim	CLASSIFICATION OF THE APPLICATION (Int.CL.6)
X	US-A-3 007 497 (SHO * column 2, line 27	BERT) 7 November 1961 - line 30; claims;	1,2,4, 6-10	B32B5/12 B29C70/22 B29C53/60
X *.	EP-A-0 113 196 (CAM July 1984 * claims; figures *	BRIDGE CONSULTANTS) II	1,2,4,	
A	FR-A-2 501 579 (VER September 1982 * the whole documen	·	1-11	
A	DE-A-17 04 925 (PLA * the whole documen			
-	·			TECHNICAL FIELDS
				SEARCHED (Inc.CL6) B29C
	The present search report has b	ees drawn up for all claims		
	Place of search	Date of completion of the search		Complete
THE HAGUE		10 September 199	6 Van	Wallene, A
CATEGORY OF CITED DOCUMENTS X: particularly relevant if taken alone Y: particularly relevant if combined with another decement of the same category A: technological background O: nea-written disclosure		NTS T: theory or princip E: earlier patent de after the filing d ther D: document cited L: document cited (T: theory or principle underlying the invention E: earlier patent document, but published on, or after the filing date D: document cited in the application L: document cited for other reasons A: member of the same patent family, corresponding	